UDL
Universal Design for Learning

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UDL- Universal Design for Learning

Using UDL to reach all learners as a starting point for creating optimal learning environments for our visually impaired students including our CVI children.
Primary Learning Objectives

- Define UDL and its history
- Use the principles of UDL that include: physical space, technology, and instruction to examine these areas when working with students to better serve their needs
- Use UDL as a tool to support team members when teaching all types of learners by giving specific ideas that include: uncluttered work environments, different modes of giving information, and allowing for multi-level learning objectives.
- Persuade educators that using a UDL model will benefit all learners and making teaching content easier not for just individuals.
COULD YOU PLEASE SHOVEL THE RAMP?

ALL THESE OTHER KIDS ARE WAITING TO USE THE STAIRS. WHEN I GET THROUGH SHOVELING THEM OFF, THEN I WILL CLEAR THE RAMP FOR YOU.

BUT IF YOU SHOVEL THE RAMP, WE CAN ALL GET IN!

CLEARING A PATH FOR PEOPLE WITH SPECIAL NEEDS CLEAR THE PATH FOR EVERYONE!
History of Universal Design (UD) in Architecture

1950s: Began to be considered in Europe, Japan, and the United States.


Ron Mace (1941-1998): Founder, Center for Universal Design in North Carolina and an architect with a disability, defined, and popularized UD.

The Seven Principles of Universal Design

- PRINCIPLE ONE: Equitable Use
- PRINCIPLE TWO: Flexibility in Use
- PRINCIPLE THREE: Simple and Intuitive Use
- PRINCIPLE FOUR: Perceptible Information
- PRINCIPLE FIVE: Tolerance for Error
- PRINCIPLE SIX: Low Physical Effort
- PRINCIPLE SEVEN: Size and Space for Approach and Use
Examples of UD in our environment:

- Ramps for all to use
- Automatic doors
- Auditory alerts at crosswalks with visual alerts
- Transition alerts with tactile pavings
- Lights switches
- Door handles
- Electronic toothbrushes
Providing Accessible Playgrounds

Team members who should be involved: Principals, PT, OT, Special Edu. Teachers, TVI, O&M, and then community members who can donate funds.
UDL Defined

UDL is a framework for personalized learning. UDL makes sense for all learners by looking at it through their point of view.

Access and how they process information
How they engage with the content and use what they learn
How they express what they know and understand

Access, engage, and express
Areas to meet our students needs using a UDL approach -

Physical space

Technology

Instruction

Specific ideas that include: uncluttered work environments, different modes of giving information, and allowing for multi-level learning objectives.
UDL is an approach to curriculum that minimizes barriers and maximizes learning for all learners.

What they found in the early years at CAST (The Center for Applied Special Technology) is that UDL was not about the learners overcoming their barriers; it was about reducing or eliminating the barriers. They started with digital books for those with reading challenges, linked definitions for those with limited vocabulary; large buttons that talked for those with limited vision and so on. Doing so CAST realized that the curriculum was the problem, not the learner.
Specific examples for the visually impaired using the Universal Design approach:

- Avoiding barriers and using a more minimalist approach
- Ease of operation for the broadest range of people
- Touch controls that use shape, position, and feel
- Flexibility and Variety
- Information given in a variety of formats- audio, touch, visual
- Large text with visual contrast
- Tactile surfaces
- Ample lighting with highlighter areas or buttons/handles that glow
- Non-glare surfaces
Know the strengths and needs of students

In order to correctly apply universal design for learning in the classroom, it’s important for teachers to be aware of the strengths and needs of each student. This can be as easy as asking each student how they want to learn that day’s lesson, and offering different choices for the content used, the reward applied, the tools used for gathering information or producing results, or the order of tasks to be completed. It also may be helpful for teachers to take note of which students excel when using certain formats, or even to involve parents in helping find their children’s strengths and needs in learning.
Many struggling and special needs students have a print disability. Teachers can meet these students’ needs by translating the three principles of Universal Design for Learning (UDL) into practice.

Provide students with multiple and flexible methods of representation — directly addresses print disabilities. UDL guidelines recommend presenting information through different modalities (e.g., through vision, hearing, or touch) and in a format that allows for adjustability by the user. For example, digital texts, such as those provided by Bookshare, allow users to enlarge text, amplify sounds, and click for supporting information such as definitions and/or images.
The list below can guide teachers and administrators to select appropriate born accessible materials to best meet the needs of their students.

1. All text is available in a logical reading order: Special tags are used to create a logical path through the primary narrative so that it is clear in what order the text should be read.

2. Presentation is separated from content: The meaning of the content should not be conveyed solely by using visual cues such as color, font size, or positioning.
3. Complete navigation is provided: A complete table of contents should appear at the beginning of the ebook and at the beginning of each section so that the reader can more easily find his place in the book.
4. Tables have headers and captions: Tables in ebooks should have labeled headers so that the reader can easily find her place in the table. Captions should also be provided so that the reader knows what information the table conveys.

5. Images are described: All images should be described using text or should have a tactile or audio alternative available.

6. Page numbers are included: The page numbers should match the print version of the same book.
7. Math expressions are written using MathML: There should be the use of Math Markup Language (MathML), a special set of tags for describing equations.

8. Alternative access to media content is provided: Captions and/or descriptions for video segments and transcripts for audio segments should be available.

9. Interactive content is accessible: For example, slider bars that display rapidly changing information, should be operable.
Supporting Team Members by using the UDL Principles so that it makes their jobs easier and benefits all instead of making special adaptations for 1-2 users.

UDL is an approach to curriculum that minimizes barriers and maximizes learning.
Video:

National Center on UDL Director David Rose explains how UDL helps meet the most pressing issues facing educators today. Drawing on brain research and the latest learning sciences, Dr. Rose describes the 3 UDL principles and what they mean for classroom practice.

https://youtu.be/pGLTJw0GSxk
For a fair selection everybody has to take the same exam: please climb that tree

Our Education System

“Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.”

- Albert Einstein
How can we show others that using the UDL design we will reach more learners and make educators jobs easier?

What can support staff do to make sure this is true?

What is our role as an itinerant teacher, O&M instructor, classroom teacher...
5 Examples of Universal Design for Learning in the Classroom
Posted lesson goals

Having goals helps students know what they’re working to achieve. That’s why goals are always made apparent in a UDL classroom. One example of this is posting goals for specific lessons in the classroom. Students might also write down or insert lesson goals in their notebooks. The teacher refers to lesson goals during the lesson itself.
Assignment options

In a traditional classroom, there may be only one way for a student to complete an assignment. This might be an essay or a worksheet. With UDL, there are multiple options. For instance, students may be able to create a podcast or a video to show what they know. They may even be allowed to draw a comic strip. There are tons of possibilities for completing assignments, as long as students meet the lesson goals.
Flexible work spaces

UDL promotes flexibility in the learning environment. That’s why in a UDL classroom, there are flexible work spaces for students. This includes spaces for quiet individual work, small and large group work, and group instruction. If students need to tune out noise, they can choose to wear earbuds or headphones during independent work.
Regular feedback

With UDL, students get feedback — often every day — on how they’re doing. At the end of a lesson, teachers may talk with individual students about lesson goals. Students are encouraged to reflect on the choices they made in class and whether they met the goals. If they didn’t meet the goals, they’re encouraged to think about what might have helped them do so.
UDL recognizes that if students can’t access information, they can’t learn it. So in a UDL classroom, materials are accessible for all types of learners. Students have many options for reading, including print, digital, text-to-speech and audiobooks. For digital text, there are also options for text enlargement, along with choices for screen color and contrast. Videos have captions, and there are transcripts for audio.
Can you think of more words that rhyme?
Talk Time:

- Turn to your left and share 2-3 ideas of what is currently a UDL principle that is working where you instruct.
- Share something you would like to implement that is a UDL principle.

Be prepared to share at least one thing with the group.
Learning Objectives Summary:

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- Pursued educators that using a UDL model will benefit all learners and making teaching content easier.
Resources and References:

- Understanding Universal Design in the Classroom by Alexa Darby, Elon University

- The Difference Between Universal Design for Learning (UDL) and Traditional Education by The Understood Team

- CAST (The Center for Applied Special Technology)  [www.cast.org](http://www.cast.org)

- [https://youtu.be/pGLTJw0GSxk](https://youtu.be/pGLTJw0GSxk): UDL at a Glance Video presented by David Rose at the National Center on UDL.